Reviewer's report

Title: The influence of taste disorders on dietary behaviors in patients with cancer under chemotherapy treatment

Version: 1 Date: 15 September 2009

Reviewer: Inger Skolin

Reviewer's report:

In my opinion the article would benefit if the authors could clarify on the issues below:

1. If there is an approval for the study from the Ethics Committee I would suggest that it is pointed out in the text. The authors wrote that the study protocol was approved by the Institutional Review Board at the participating center. Is that corresponding to the Ethics Committee?

2. In my opinion there are not sufficient details provided to replicate the work. I suggest that the authors clarify what umami testing substance that was used. I presume it was Sodium glutamate. My suggestion is that the authors provide information about the highest and lowest concentration i mmol/L of the testing substances.

3. The authors found that patients with sweet and bitter taste disturbances had a lower energy intake. The finding raise the question: Did this result in loss of body weight?

4. My suggestion is that the authors calculate the individual energy and protein requirement. Basal metabolic rate, BMR, can be calculated by for example Harris-Benedict energy estimation. The physical activity level, PAL, could be approximatively defined. The basal energy requirement is approximately 20 kcal per kilogram body weight per day and protein requirement of an healthy individual is approximately 0,8 gram per kilogram body weight. However, the actual protein requirement of an individual with cancer is not known, it might be 1,0 to 1,5 gram per kilo and day. The consumed energy and protein could be calculated and put in relation to the calculated needs. This would show wether the cancer patients were able to meet their nutritional needs or not. It would say more than just energy intake in kcal.

5. In Table 1 p-values for gender and age are presented. I don’t find it useful to test p-values on that kind of data.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests